

BARRAC NEWS

Sept 83

83/09

9/83



Monthly Newsletter of the Ballarat Amateur Radio Group

REGISTERED BY AUSTRALIA POST, PUBLICATION NO. VBH3397

THE big wheel



			<u>Home</u>	<u>Bus.</u>
<i>PRESIDENT</i>	MURRAY FELSTEAD	VK3 AAI	42 0447	31 5000
<i>VICE-PRESIDENT</i>	GEORGE FOWLER	VK3 DOK	32 6863	39 1954
<i>SECRETARY</i>	JIM WRIGHT	VK3 VZD	32 7563	
<i>ASSIST. SECRETARY</i>	HANK HILVERTS	VK3 NIA	39 3332	
<i>TREASURER</i>	DICK ANTOSIEWICZ	VK3 AEX	32 3273	32 1818
<i>ASSIST. TREASURER</i>				
<i>TECH. OFFICERS</i>	PHIL SEDDON	VK3 AQM	31 5220	31 3166
	DICK ANTOSIEWICZ	VK3 AEX	32 3273	32 1818
	MURRAY FELSTEAD	VK3 AAI	42 0447	31 5000
	IAN ROBINSON	VK3 BTX	32 4139	
<i>QSL MANAGER</i>	CLIFF BILSTON	VK3 PAF	34 7626	
<i>AWARDS MANAGER</i>	MAURIE BATT	VK3 XEX	42 2245	
<i>PUBLICITY OFFICER</i>	GEOFF SMITH	VK3 KLZ	32 1037	
<i>EDUCATION OFFICER</i>	JIM HUMPHRIES	VK3 ANH	32 1613	32 1719
<i>PROPERTY OFFICER</i>	DICK ANTOSIEWICZ	VK3 AEX	32 3273	32 1818
<i>NEWS LETTER EDITOR</i>	HENRY MORITZ	VK3 DXC	32 7569	30 1800
<i>ASSIST. NEWSLETTER ED.</i>	CLEM JARVIS	VK3 YDI	31 4179	
<i>NET CO-ORDINATOR</i>	CLIFF BILSTON	VK3 PAF	34 7626	
<i>WICEN</i>				
<i>COMMITTEE</i>	BILL JOHNSON	VK3 DWJ	40 2288	
	HARRY HEKKEMA	VK3 KGL	35 7563	

Minutes of Special General Meeting held 26.8.83.

Meeting called to order by President Murray at 7.50pm.

APOLOGIES. Ted, NIZ. Stan, SE. Fred, PFF. Maurie, XEX. Bob, BNC. Geoff, KLZ. Brian, ZBS. Bud, NFZ.

MINUTES of previous meeting as printed in News Letter confirmed.

INWARD CORRESPONDENCE Eagle Electronic Equipment Insurance.
VK3 NLO re Bendigo Premier Town Award. A.R.A. re Club Directory Entry.

OUTWARD CORRESPONDENCE Milton ZL1 BJM Thanks for diodes etc.

TREASURERS REPORT Current a/c \$334.43 14 day a/c \$508.24.
accounts passed for payment \$74.50.

QSL MANAGER Cliff reported 151 cards in and 276 out, he has also collected 68 kg of unsorted cards and would appreciate help with sorting.

AWARDS MANAGER Maurie, who unfortunately is suffering from an accident reported that 5 Goldrush 5 Western Zone and 13 DX Widows Awards were applied for.

CLUB NET is still being well supported by Members.

TECHNICAL David VNB reported that Beacon has to be relocated.

PROPERTY OFFICER. Dick reported on further work on Club Generator and also that a cover for this has been donated.

NEWS LETTER Henry requested more material and would like some photographs.

GENERAL BUSINESS. Notice of Motion having been given it was moved by Harry KGL as proxy for Geoff KLZ, seconded Bill DWJ that:-
The Club constitution be amended by the addition of paragraph 2.2b to read as follows! 2.2b ASSOCIATE MEMBER. Any person not residing in the Ballarat area may be elected as an associate member at a reduced fee and be eligible to participate in all B.A.R.G. activities, but shall have no voting rights! The motion was CARRIED.

Vintage Car Clubrooms still to be inspected.

Secretary to inquire into possible use of room at old Fire Station.

Max YMW to sell Club posters and stickers at Mooroopna Field Day.

Club Xmas Party this year will be a family bar-b-que.

Visit to McLoed Electronics to be arranged for mid November if possible
Bill DWJ to co-ordinate.

25 W.I.A. Callbooks to be obtained also 12 W.I.A. badges.

Dick VU gave a report on progress of Tonga Radio Club.

The meeting then closed and after a recess the members re-assembled to listen to an interesting and entertaining address by Allan Noble.

Allan Noble VK3 BBM is President of the WIA Victorian Division and a Federal Councillor also a talented speaker. His address covered many aspects of the functions of the WIA and what it does for amateur radio, Wicen and the part it played in the Ash Wednesday fires.

73s Jim VZD.



On the dole, down at the heels, out of luck, our brave young lads : Barry Nios, Ian Croobie, Steven Sedgwick, Mark Vorstenbosch, Lyndon DeValle, Bruce Widdop, Jeremy Clarkson, and Geoff Wallis, catch up with the latest news. A deep sense of patriotism is stirred as they read of Nazi atrocities. They prepare to answer the call to arms. Will you?

BALLARAT THEATRE WORKSHOP WANTS YOU !!!!

Able-bodied men and women are given the call to rally to the B.C.A.E. Art Office or Frank Ford Travel to support THE CAUSE !!!!

Remember, there is no such thing as being too young or too old to do your bit in the name of freedom and justice !!!!

BE QUICK !! RATIONING MAY START SOON !!

Follow our raw recruits as they suffer the nightmare of basic training, savour the delight of canteen refreshment and witness the triumphant return of our heroes, the "Rats of Tobruk".

SHOW YOUR PATRIOTISM BY INVESTING IN A TICKET TO

HITZ OF THE BLITZ

THE WAR MUSICAL REVUE!

VENUE: Ballarat C.A.E. Drama Studio

DATES: October 13th, 14th, 15th, & October 19th, 20th, 21st, 22nd

PRICES: Adults \$4.50 Students \$3.00
Concessions (10 or more) Adult groups \$3.50 each
Student groups \$2.50 each

BOOKINGS: Frank Ford Travel 315122 or B.C.A.E. Art Office 301800

SUPPORT BALLARAT THEATRE WORKSHOP : B.C.A.E.'s OWN COMMUNITY DRAMA GROUP

BARG
CULTURE
NITE...
FRI
14th...
000

Money & names
to Clem J.
210 Humffray St NH
by - Oct 1st
(\$3.50)

GIANT VERY-USED FURNITURE

single & double beds... wardrobes..... tables.....
chairs..... side boards.... shack furniture even a
few old chais..... old valves.... 18V 50A transformer....
bee hive... horn speakers..... trailer wheels.... free oil
tank..... and lots more.....

Clem 210 Humffray St NH.

11-314179.
15-321951.

SALE

05

1983-09
Missing

1983-09 06
Missing

83/09

HAVE A GO!

240 VOLT HZ METER

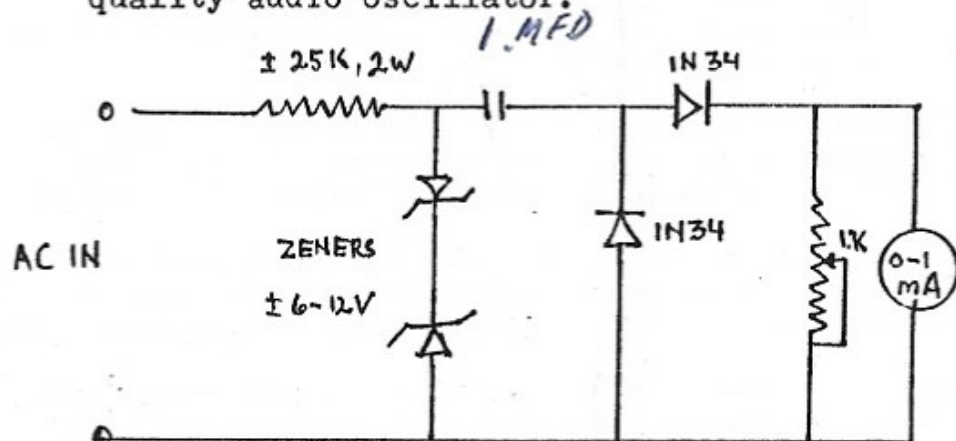
(Stan, VK3SE)

Portable A.C. units can have wide variations in frequency, due to load conditions affecting the alternator speed.

The frequency meter shown will indicate 50 HZ when calibrated. The zeners can be any voltage, about 6V-12V. The 25K resistors may have to be adjusted to suit zeners.

The meter is best calibrated on S.E.C. for 50 HZ. a variable A.C. supply to be sure that the zeners are working, as there should be no variation in the meter reading with different voltages.

Other frequencies can be calibrated with a good quality audio oscillator.



Flog n' Swoop

WANNA BUY A CROW?



HOT LITTLE ITEMS.....CHANCE OF A LIFETIME.....COME N' GET 'EM!!

Five-Inch CRO-kits...Each kit contains one 5BP1 CRO tube, also TWELVE(!) new(untouched by human hands) 6AC7 velves and very comprehensive instructions. A MUST for the invertebrate dabbler.

A snap at \$20.00(or an offer) Clem YDI



WANTED DEAD OR ALIVE
GENERAL COVERAGE RECEIVER(SW)

At least 4-20MHz. Older type(valves) or newer black box will be considered. MORE ADS AND INFO FOR THE MAG WOULD ALSO BE VERY WELCOME. EXTRACT THE DIGIT! Contact Clem YDI 314179(h) or 321951(BH)

1. Stripline Circuitry. There are several ways of doing this.
 - (a) Draw on copper and etch.
 - (b) Stick on strips and pads of Fablon and etch.
 - (c) Cut away copper with a vertical milling machine, 3ZL.
 - (d) Cut strips vertically and horizontally with a hacksaw.
2. Earthing.
 - (a) Solder edges top to bottom.
 - (b) 'Stitch' by drilling many small holes and inserting wire, solder top and bottom.
 - (c) Solder earth legs of all trimmer condensers top and bottom. Sometimes also the resistors and bypass condensers.
3. Leads. All connections of minimum length.
R.F., chokes .. wind up the tail of the resistor.
4. F.E.T's . Amazingly tough and heat resistant, but it is good practise to earth the soldering iron to the circuit board and solder quickly.
The correct operating point is important to obtain the best gain and or lowest noise so fit a potentiometer in the bias supply.
Observe S Meter of the I.F. Receiver for the best performance.
5. Bypass . Feed through condensers are essential and they simplify construction by providing connection points. Good move to put a "stitch" beside each.
6. Devices. Good word that. BF91's are OK and cheap. Use as Mixers and RF Amps. Alternatives for Amps are MRF901 and 3SK97 and other more costly GaAs FETS
7. Power Source. A small regulated 12 volt pack with 5 to 9 volt Zeners on the boards OK for BF91's.
GaAs Fets requiring 3v plus and 3v neg supplies are a bit involved when AC powered but a simple Battery Box with a pot for the bias control and a rotary switch arranged to switch the bias on first and off last is much easier.
8. Oscillator Chains. Practically any crystal seems to oscillate happily in the usual overtone circuits around and doubling and tripling means only another transistor so that frequency multiplication rises steadily to around 432 m/h using 2N3563 and 3564 transistors. Going further on up in freq. happens rather spectacularly when the varactor ability of a DIODE is employed. Multiplications of NINE times are not uncommon. As an example, in my converter a 57.550 m/h crystal doubles to 115.1 m/h doubles to 230.2 m/h and then drives a 1N911 diode to multiply FIVE times to 1151 m/h where there is still enough RF to give good mixer injection.
9. Signal Generator. Strongly recommend the making of small battery powered units for the bands you wish to explore. Put them in a tin box with an output socket and identification. I keep the batteries OUTSIDE. A plastic carrier for six penlight cells is connected to whichever piece of gear I wish to use. Economical and prevents damage from leaking cells. Fit a metal clip on the box to hold the battery pack to keep it all tidy.

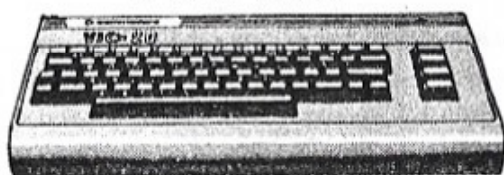
From a great variety of crystals 144 m/h can be reached with only two transistors. 8, 12, 24, and 32 m/h crystals can be obtained for \$2 each (Irving's) and are all suitable. The precise frequency can be pushed and pulled either by capacitance but more generally by adjusting the slug in the series resonating coil to the crystal.
My 12 m/h \$2 crystal comes out at 1296.262 m/h.

10. Other Test Gear. A 50 to 500 micro amp meter with a diode in series with about six inches of twisted hookup wire to a small two turn link enables R.F. output from each stage to be detected and evaluated by comparison. Try several diodes..some work lots better than others.
Frequency Counters with prescaler to 550 m/h make the setting of oscillator chains so easy.
I bought a Dick Smith kit and enjoyed putting it together. A cheap unit but it looks great and works very well.
11. Plugs and Sockets. Use BNC for most connections or type N to the aerial. These ensure the best impedance match therefore lowest loss. I have not yet noticed any difference in performance between the cheap chrome plated and the good silver plated ones, but I did find that it paid to use plugs and sockets to connect separate units (e.g. RF amps etc). You just cannot jumper a piece of wire from one to the other ..the signal just plain vanishes ! Short co-ax connectors with appropriate plugs and sockets keeps it 'in' and you cannot afford to lose any of it !
12. R.F. Indicator. Required for tuning the transmitting works into the aerial. A simple stripline in a box and a meter of adequate sensitivity. This was another place where it paid to go through the box of diodes to find a 'good' one. Tremendous difference in them.
13. Reading and Circuits. R.S.G.B. VHF/UHF Manual.
A.R.R.L. Handbook.
VK3ZMQ Graham.
Plus snippets gleaned from here and there.
All available as required.
14. WARNING. Gig stuff is dangerous to eyes if you get too close to the output over a few watts, and never look into aerials as their gain is so high those little watts look like big watts.
15. GENERAL. Whilst these 'tips' are derived from the desire to 'get a signal on' 1296 the remarks apply equally to those who wish to do the same on 432 using their 2 meter gear, and a hope that someone else will warm up warm up the soldering iron and have a go.
Eric 3ZL and myself have had great enjoyment exploring this completely new territory (to us) and my sincere thanks to Eric for his unstinted help and enthusiasm.

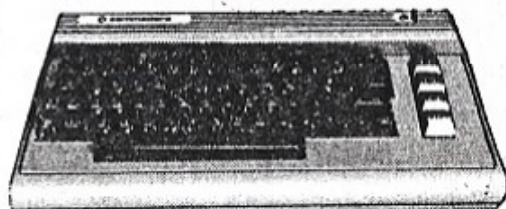
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DEAR B.A.R.G. MEMBERS

OWING TO THE GENERAL APATHY PREVAILING IN THE CLUB,
FOUR PAGES IN THIS ISSUE HAD TO BE LEFT UN-PRINTED.

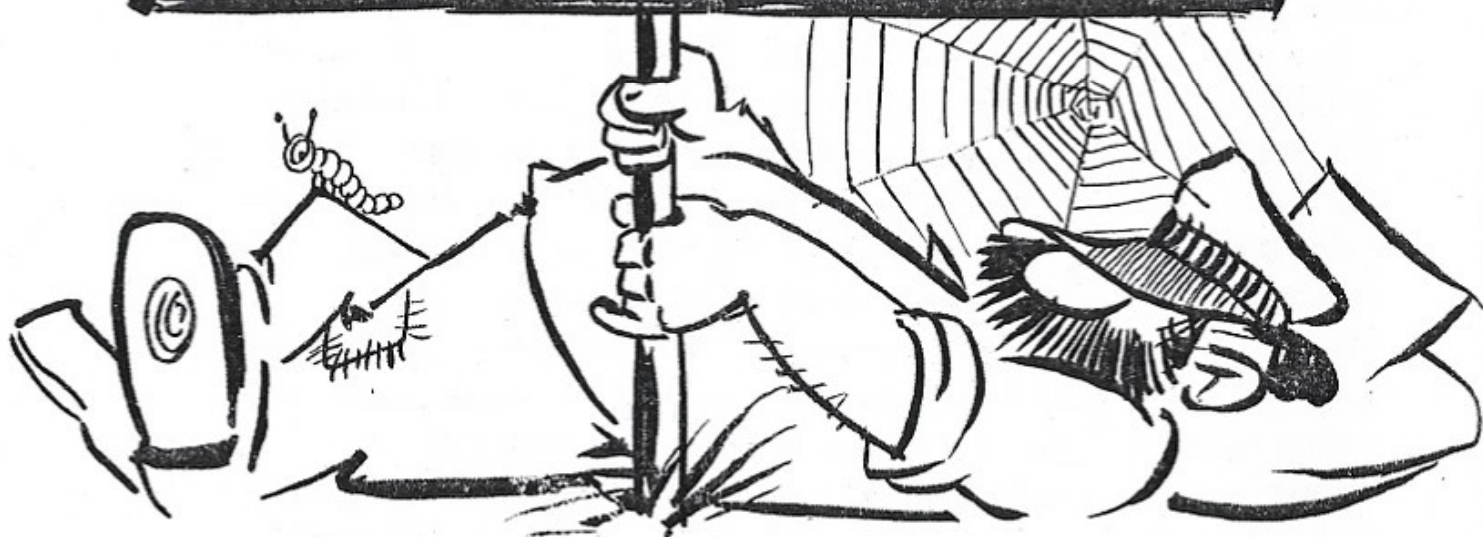
I HAD PROMISED YOU THAT I WOULD EDIT, ILLUSTRATE AND
EVEN RE-TYPE YOUR STUFF, SURE 'NUFF, BUT ALSO REMEMBER:

I'M NOT GOING TO WRITE IT, LEASTWISE NOT BY MYSELF.

THEREFORE:

KINDLY GET OFF YOUR COLLECTIVE BUTTS AND DO YOUR BIT!

YOURS TRULY, THE EDITOR (oh yeah? Same to you, feller!)



Save a fortune -

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45 ft. FREE STANDING TOWER IN FAIRLY GOOD CONDITION

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DAFFY DEFINITIONS ●

RESISTOR	a girl who says "NO"
TRANSISTOR	a girls who says "MAYBE"
FULL WAVE	an enthusiastic salutation
HALF WAVE	a luke-warm greeting
QUARTER WAVE	a couldn't-care-less- greeting
FEEDBACK	a "technicolour yawn"
SKIP DISTANCE	how far you can hop on one leg, without touching ground
QUAD	when maternity dept. has a stocktaking sale
YAGI	very religious person, usually of oriental origin
VOLT	where you store your valuables
AMP	well-known insurance company
CURRENT	shrivelled-up grape, found in fruit cakes
ROTATOR	un-cooked spud with an irish accent
COAXIAL	attached to cars, usually with a wheel on both ends
FREQUENCY	how often you do or can't do something
VARACTOR	a versatile theatrical gentleman
CHIP	usually eaten with fish, doused in tomato sauce
MICROCHIP	as above, but with inflation taken into account
POTENTIOMETER	Device for measuring male virility
OXOMETER	instrument for measuring the size of a bull
TRIM POT	a boozier who's just been to a health farm
GREENCAP	chap who carries your luggage at the airport
COLD CATHODE	tv tube just gone bung
MICROHENRY	VK3DXC as a little boy (ah, -memories!)
DYNAMO	moustache just about to disappear
CHOKE	what you do when you see the rig's price tag
RADIOACTIVITY	when the bands open up (and you're in bed)
TIME CONSTANT	your watch has stopped
RELAY	warm hearted girl who comes back for more
CONDUCTOR	fellow who threatens the orchestra with a stick
SATURATION	when you've reached .05 or better
LOG POT	primitive wooden vessel, found under beds in outback hotels; now almost extinct
SEMICONDUCTOR	backseat driver on a big truck, usually the XYL
BLEEDERS	a haemophiliac resistor, also used as expression by hams trying to replace same, when gone phht.

HOW ABOUT GIVING ME A FEW MORE. FOR THE COMMON GOOD?????

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EVERYTHING FROM A TO Z IN ELECTRONICS

QRM
 34 DXC



...."well, mum, then he told me he was a QRP and had to go QRT since he's got QSB....
 ~ fer pete's sake, -ask 'ad what he's on about!!"

IN MOMENTS LIKE THESE...



...YOU WONDER...

WHY WOULD ANYONE IN HIS RIGHT MIND WANT TO BE A HAM...??